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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,478	06/04/2001	Osamu Kuroda	51431-20001.00	5835

25224 7590 05/18/2005
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EXAMINER

KOCH, GEORGE R

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/873,478

Applicant(s)

KURODA, OSAMU

Examiner

George R. Koch III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/15/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 22-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/8/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-44 in the reply filed on 2/15/2005 is acknowledged.
2. On February 14th, 2005, an interview to discuss the previous species requirement was held.
3. This application contains claims directed to the following patentably distinct species of the claimed invention:

Wherein the

A) apparatus includes a wafer delivery device as in Figure 2, or

B) apparatus includes a wafer delivery/posture changing device as in Figure 6.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include

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all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. Applicant's election without traverse of Species A, claims 1-21 of Group I in the reply filed on 2/15/2005 is acknowledged.

Claim Rejections - 35 USC § 102

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko (US 6,009,890) and Yoshioka (US 6,051,349).

Kaneko discloses a liquid processing apparatus (see Figure 1 and 25, for example) comprising: a liquid processing section (items 52, 53) for applying a predetermined liquid processing to a substrate; a carrier delivery section (items 5a) for delivering a carrier having a plurality of substrates housed therein; a carrier stock section (items 5, 2) capable of storing plurality of carriers; a substrate transfer section (item 4) for transferring the substrate into said liquid processing section; a carrier transfer device (item 8) for transferring the carrier within said carrier stock section, and a substrate inspecting device (notch aligner, item 24, see figure 10, line 32 to Figure 11, line 4) for inspecting the number and/or the housed state of substrates within the carrier.

Kaneko does not disclose a carrier transfer device control section for controlling said carrier transfer device such that the carrier is stored in said carrier stock section in the case where it is judged possible to apply a liquid processing to the substrate on the basis of the result of the inspection performed by said substrate inspecting device.

However, one in the art would appreciate that including a control mechanism to respond according to the sensor is known in the art. Yoshioka discloses a substrate inspecting apparatus connected to a device control section (item 45) which modifies later processing based on the results of the inspecting operation (see Figure 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such controls in order to ensure proper processing.

As to claim 2, the apparatus of Kaneko as modified by is capable of being used such that said carrier transfer device is also capable of delivering the carrier into and out of said carrier delivery section, said substrate inspecting device capable of inspecting the substrate within the carrier transferred into said carrier stock section, and said substrate transfer section transfers the substrate between said carrier stock section and said liquid processing section.

As to claim 3, the apparatus of Kaneko as modified by is capable of being used such that said substrate inspecting device is capable of inspecting the substrates within the carrier in the position where the substrates are delivered between said substrate transfer section and the carrier.

As to claim 4, the apparatus of Kaneko as modified by is capable of being used such that the carrier has a delivery port for delivering the substrates into and out of the carrier and a lid for opening/closing said delivery port, and said apparatus further comprises a lid opening/closing mechanism (delivery outlet 5b) for opening/closing said lid when the substrates within the carrier are capable of being inspected by said substrate inspecting device and/or the substrates are transferred between the carrier and said substrate transfer section.

As to claim 5, the apparatus of Kaneko as modified by is capable of being used such that carrier transfer device is controlled by said carrier transfer device control section such that the carrier, for which it has been judged that the liquid processing of the substrates within the carrier should be stopped, is returned back to said carrier delivery section.

As to claim 6, the apparatus of Kaneko as modified by is capable of being used said carrier transfer device is controlled by said carrier transfer device control section such that, where another carrier, which is to be processed and forms a pair with the carrier for which has been judged that the liquid processing of the substrates housed in the carrier should be stopped, is already stored in said carrier stock section, the another carrier is returned to said carrier delivery section.

As to claim 7, the apparatus of Kaneko as modified by is capable of being used the liquid processing of the substrate is started after the number of carriers stored in said carrier stock section has reached a predetermined number.

As to claim 8, the apparatus of Kaneko as modified by is capable of being used the substrates housed in at least two carriers are collectively subjected to a liquid processing.

As to claim 9, the apparatus of Kaneko further discloses a parking area (for example, locations 20 or 40, and see Figure 2) for temporally disposing substrates before the a predetermined number of aligned liquid processing in the vicinity of said liquid processing section.

As to claim 10, the apparatus of Kaneko as modified by is capable of being used another device for inspecting of substrates after the substrate inspecting the number and/or arranged state liquid processing.

Claim 11 is rejected on similar grounds as claim 1 above. Additionally, Kaneko discloses wherein said substrate transfer section includes a substrate delivery device for delivering substrates into and out of the carrier; a substrate transfer device for

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delivering substrates into and out of said liquid processing section; and a substrate transplanting device for delivering the substrates in a substantially horizontal state into and out of said substrate delivery device and for delivering the substrates in substantially a vertical state into and out of said substrate transfer device (see items 40 and 40a and column 10, lines 10-13, and column 11, lines 5-12).

Claim 12 is rejected on similar grounds as claim 2 above.

As to claim 13, Kaneko discloses a posture changing mechanism for delivering the substrates in a substantially horizontal state into and out of said substrate delivery device and for changing the posture of the substrate between a substantially horizontal state and a substantially vertical state; and a substrate vertical holding mechanism for delivering the substrates in a substantially vertical state into and out of said posture changing mechanism and for delivering the substrates in a substantially vertical state into and out of said substrate transfer device (see items 40 and 40a and column 10, lines 10-13, and column 11, lines 5-12).

Claim 14 is rejected on similar grounds as claim 3 above.

Claim 15 is rejected on similar grounds as claim 4 above.

Claim 16 is rejected on similar grounds as claim 5 above.

Claim 17 is rejected on similar grounds as claim 6 above.

Claim 18 is rejected on similar grounds as claim 7 above.

Claim 19 is rejected on similar grounds as claim 8 above.

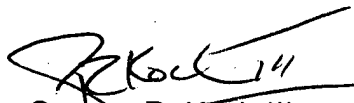
Claim 20 is rejected on similar grounds as claim 9 above.

Claim 21 is rejected on similar grounds as claim 10 above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


George R. Koch III
Patent Examiner
Art Unit 1734

GRK
5/16/2005